

**RESPONSE TO PUBLIC COMMENTS
45-DAY PUBLIC NOTICE AND COMMENT PERIOD
JUNE 27, 2008 TO AUGUST 11, 2008**

**Consolidated Universal Waste Regulations and Authorized Treatment of
Electronic Hazardous Waste - Final Regulations**

DTSC CONTROL NUMBER: R-2006-02

The Administrative Procedure Act requires that draft regulations be made available for public review for a period of at least 45 days. Copies of the proposed regulations were made available to the public from June 27, 2008 to August 11, 2008.

Post hearing, the draft regulations were revised to incorporate public comments and were made available for public review during one supplemental 15-day comment period. This comment period started September 20, 2008 and ended October 6, 2008.

DTSC has summarized herein each of the comments received and provided an explanation of how the proposed rule has been changed to accommodate each objection or recommendation, or the reasons for making no change.¹ This requirement applies only to objections or recommendations specifically directed at the agency's proposed action.

The term “outside of the scope of this rulemaking” does not mean that the comment is irrelevant to the subject matter of electronic hazardous waste authorized treatment standards. This term indicates that the recommendation or objection made by the commenter is either (1) not specifically directed at the proposed language, or (2) addresses existing regulations which are not under review.

¹ For purposes of this Response to Public Comments, all abbreviations and acronyms are provided in the Initial Statement of Reasons, R-2006-02.

List of Commenters

Organization	Comment Number(s)	Contact Person
IMS-Electronics	1A-D	Kathriner Rehder
Sims Recycling Solutions	2A-G	Lavanya Ranganath
Council of California Goodwill Industries	3A-E	Otto DeLeon
AER Worldwide	4A-G	Andre Weiglein
Portable Rechargeable Battery Association	5A-H	George Kerchner
Rechargeable Battery Recycling Corporation	6A-H	Greg Broe
ECS Refining	7A-K	Kenneth R. Taggart
ARC International*	8A	Mike Easterbrook
City of Fontana	9A	Stephanie Hall
Rural Counties Environmental Services Joint Powers Authority	10A-"O"	Larry Sweetser

Note: * Denotes commenter who presented oral comments during the August 11, 2008 Public Hearing. This commenter did not submit written comments during the 45-Day Public Comment Period.

All other comments received for the 45-Day Public Comment Period were in written form.

1. Sections 66260.10² and 66273.9: Definition of "electronic device".

Summary of Comment

10A and 10F: Allow electronic device to include "small major appliances" so that they may be collected during universal waste collection events. This will avoid collection event sponsors from having to arrange for additional containers, devote staff time to segregate incoming materials, or rejecting these materials.

Amend definition to include "small major appliances."

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment because it conflicts with DTSC's decision to expressly exclude from the definition of "electronic device" all "major appliances," as defined at Public Resources Code section 42166. This express exclusion within the definition of "electronic device," coupled with the inclusion of "some appliances," makes clear that any "electronic device" that does not meet the statutory definition of a "major appliance" (i.e., an electronic device that is an appliance that is not a "major appliance") can be handled as an "electronic device," as defined in these proposed regulations.

2. Section 66261.9(a)(5): CRT glass classification as universal waste.

Summary of Comment

7A: CRT glass that has been separated from other components of the CRT and/or monitor should be classified as a commodity rather than a universal waste, as long as it is destined for proper recycling.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC agrees that some CRT glass that has been separated from other components of the CRT and/or other equipment (e.g., computer monitors) is a commodity; however, the criteria for designating CRT glass as a universal waste can be found in the previous rulemaking related to electronic hazardous wastes (R-01-06). The Initial and Final Statement of Reasons for R-01-06 are included in the **Studies Relied On** section of the Initial Statement of Reasons for this rulemaking.

With this rulemaking, DTSC is not adopting regulations that will add new hazardous wastes to the existing State program. Under existing hazardous waste regulations, waste CRT glass that is "characteristically hazardous" is already hazardous waste and may be managed as universal waste.

² For purposes of this Response to Public Comments, all regulatory references are to the Cal. Code Regs., tit. 22, div. 4.5, unless otherwise specified.

3. Section 66261.9(b): Destination facilities required to manage universal waste as hazardous waste, except as proposed in section 66273.60.

Summary of Comment

7B: All facilities engaged in the same universal waste activities (storage, shredding, sorting, shipping off-site for recycling) should be regulated in the same way. Believe that it's discriminatory and unfair and imposes a penalty on permitted facilities for their additional activities conducted under [their] permit.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Destination facilities are defined in sections 66260.10 and 66273.9, and are typically facilities that conduct hazardous waste activities not provided for under the reduced regulatory schemes provided in chapter 23. Under existing universal waste regulations, destination facilities must conduct all universal waste management activities under full hazardous waste requirements. DTSC disagrees with the comment that a destination facility be exempt from full hazardous waste requirements when conducting any universal waste management activities. DTSC agrees, however, that some universal waste activities may be regulated under chapter 23 at destination facilities. In this rulemaking, DTSC proposes to allow certain "lower risk" universal waste management activities (e.g., storage for certain universal wastes, battery management activities) to be conducted at destination facilities under the reduced chapter 23 requirements if certain conditions are met. Specifically, a destination facility that conducts the universal waste management activities specified in proposed section 66273.60 may do so under the less stringent universal waste requirements rather than under the full hazardous waste requirements (as is specified in existing §66261.9).

4. Section 66261.50: List of mercury-containing products that are hazardous waste when disposed.

Summary of Comment

10B: Include reference that these products can also qualify as universal waste.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking. However, DTSC has considered the comment and disagrees that additional language be added to indicate that the mercury-containing wastes listed in this article may also qualify as universal waste, as is proposed by the commenter. The language of existing sections 66261.9, 66273.1 and 66273.4 provide sufficient clarity for specific conditions under which mercury-containing wastes listed in this article may be managed as universal waste.

5. Sections 66264.1(d), 666273.60(b), and 66273.60(c): Allow destination facilities to store electronic devices and CRT devices under universal waste requirements rather than hazardous waste requirements, provided no treatment is conducted.

Summary of Comment

7C: Please confirm this interpretation.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC agrees with the interpretation of the comment that under the provisions named in this comment that destination facilities that store and accumulate certain electronic devices (as defined in this rulemaking) and CRT devices may do so under the applicable universal waste requirements contained in chapter 23. Storage of electronic devices and CRT devices under these requirements, however, is conditioned to only those electronic devices and CRT devices that meet the additional requirement that they are universal wastes that are non-RCRA hazardous waste, as is specified under proposed section 66273.60, subsection (c). This subsection contains other related conditions of that storage/accumulation activity, including requirements related to modification of the facility's existing hazardous waste facility permit.

DTSC has further clarified in the Final Statement of Reasons for this rulemaking that storage and accumulation of certain electronic devices and CRT devices may be conducted under applicable chapter 23 requirements.

6. Sections 66264.1(d), 66273.60(b), and 66273.60(c): Destination facilities handling of universal waste under hazardous waste requirements.

Summary of Comment

7D: Please provide examples of circumstances under which a "destination facility" would be required to handle universal waste under the complete hazardous waste management standards rather than the universal waste management standards.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. However, DTSC has considered the comment and agrees that further clarification of these circumstances is necessary. DTSC has provided further clarification on this point in the Final Statement of Reasons for this rulemaking by providing examples of situations where compliance with the full hazardous waste management requirements is necessary when managing certain universal waste at a destination facility (i.e., any other universal waste management activity that is not authorized under proposed §66273.60).

7. Section 66273.3(b)(3): Requirement that an electronic device that exhibits any other characteristic of hazardous waste (other than the toxicity characteristic) must be managed as hazardous waste.

Summary of Comment

10C: What about batteries contained in electronic devices? These electronic devices would also be corrosive. Modify language to include "or electronic devices that contain batteries" must be managed as hazardous waste.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Under the conditions stated in the comment, these electronic devices (tested as whole devices) would typically be shown to meet the hazardous waste characteristic of toxicity. The battery contained in a typical electronic device would not cause the electronic device (when tested as a whole device) to meet the additional hazardous waste characteristic of corrosivity.

The Final Statement of Reasons provides additional clarification that electronic devices that contain batteries be managed as electronic devices under chapter 23. When a battery is removed from an electronic device under the authorized standards contained in chapter 23 (either under art. 3 and/or art. 7) that removed battery would be considered a treatment residual that would need to be evaluated for whether it is a hazardous waste or a universal waste subject to regulation under chapter 23.

In addition, under the federal universal waste rule (on which the state universal waste rule for batteries is based) USEPA makes a clear distinction that hazardous waste batteries are defined in 40 Code of Federal Regulations sections 260.10 and 273.9, and do not include "the unit or device in which the battery is contained" [60 Fed. Reg. 25504, (May 11, 1995)]. Therefore, DTSC's interpretation that an electronic device and any battery contained therein are managed as separate universal waste categories under existing and proposed universal waste regulations is consistent with federal regulations.

8. Section 66273.3(b)(6): Allows waste electronic devices that are refurbished and returned to use to not be managed as universal waste (when refurbishment and reuse makes the electronic device no longer a waste).

Summary of Comment

10D: Agree with this proposed language.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

9. Section 66273.3(b)(6): Allows waste electronic devices that are refurbished and returned to use to not be managed as universal waste (when refurbishment and reuse makes the electronic device no longer a waste).

Summary of Comment

3B: Request "regulatory acknowledgement" that electronic devices donated to non-profit organizations such as Goodwill are not classified as electronic waste until they are transferred to the non-profit's processing unit and determined to be non-saleable.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. Such an amendment would be inconsistent with the section 66261.2 definition of a waste, which is not being amended in this rulemaking. From the time that a donated electronic device is received at a non-profit's donation site until it is transferred to and evaluated by the non-profit's processing unit and determined to be operable, the electronic device must be managed as a universal waste electronic device. Once this determination is made, the non-profit must continue to manage the electronic device as a universal waste unless it can make the demonstration required by proposed section 66273.3, subsection (d). Specifically, the non-profit must be able to demonstrate that its retail operation is a viable market for the electronic device. This demonstration requirement protects against sham recycling. Absent demonstration of a viable market, the only recycling option for the non-profit would be reclamation. When such electronic devices are held for reclamation, they are wastes pursuant to section 66261.2, subsection (d)(3).

10. Section 66273.3(c) [correct citation to comment is 66273.3(b)(6)]: An electronic device becomes a waste when it is "stored prior to being sent for reclamation".

Summary of Comment

4A: The commenter requests that the Department clarify that the "usable devices" and "devices with usable components" can lose their status as universal waste electronic devices [electronic devices] once they arrive at a facility and are sorted into those that are usable and those that are truly wastes.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. Such an amendment would be inconsistent with the section 66261.2 definition of a waste, which is not being amended in this rulemaking. For usable electronic devices to lose their waste classification after they arrive at a facility and are segregated from those that are not usable, a universal waste handler must be able to make the demonstration required by proposed section 66273.3, subsection (d). Consequently, in addition to segregating usable devices from unusable devices, the handler must be able to demonstrate that the usable devices are managed upon segregation as if they have

use or reuse value and that there is a known market for the use or reuse of the segregated devices. This demonstration requirement protects against sham recycling. Absent a known market at the time of segregation, the only recycling option for the handler would be reclamation. When such electronic devices are held for reclamation, they are wastes pursuant to section 66261.2, subsection (d)(3).

Unlike usable devices, "devices with usable components" would not lose their status as universal waste electronic devices once they arrive at a facility and are sorted into those that contain usable components and those that do not. Usable devices held to reclaim usable components are wastes pursuant to section 66261.2, subsection (d)(3).

11. Section 66273.3(c): Conditions under which electronic devices and CRT devices are "used" and "unused" and then become a waste.

Summary of Comment

7E: We believe that the Department is in error in determining that electronic devices and CRT devices [which are electronic devices] become wastes when "stored prior to being sent for reclamation." This is the case when a generator may not be able to determine whether an electronic device or CRT device has utility or can be reused in whole or in part by another party.

The commenter suggests that an electronic device and a CRT device should be considered a waste when it has been determined that it has no further use for resale, refurbishment, or as a source of reusable electronic components.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. See Response to Comments 9 and 10.

12. Section 66273.8: Household exemptions.

Summary of Comment

5A and 6A: Portable Rechargeable Battery Association (PRBA) [and Rechargeable Battery Recycling Corporation (RBRC)] supports the proposal to expand the locations where household generators can deposit universal waste by adding universal waste transporters and authorized curbside household hazardous waste collection programs to the existing universal waste handler and destination facility options.

Response

DTSC has reviewed the comment and noted the comment in support of the proposed text.

13. Section 66273.9: Definition of universal waste handler includes owner/operator of a facility that receives universal waste from other universal waste handlers. [Section 66273.32 requires notification by universal waste handlers who accept electronic devices, CRTs and/or CRT glass from any offsite source.]

Summary of Comment

3E: Provision related to defining a Goodwill organization or other non-profit that accepts donated goods should be clarified in the proposed regulations to ensure Goodwill locations can function effectively and successfully within the program. We cannot be expected to have the scientific acumen to understand and navigate through highly complex and technical regulations that are tailored for companies that accept and process e-waste as their core business.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment, which is not within the scope of the rulemaking.

In addition, universal waste handler is defined in section 66273.9 as a handler who accepts universal wastes from another universal waste handler (a universal waste handler is defined by each location where the universal waste is received/accepted/managed). Although the universal waste handler in some cases may be a household or CESQUWG that is exempt from the requirements of chapter 23 (as specified in existing and proposed text of §66273.8), the universal waste handler who receives that universal waste is still subject to regulation under chapter 23 for the management of that universal waste received/accepted. These requirements include the notification, reporting and record keeping requirements contained throughout the chapter. This regulatory interpretation is also consistent with those interpretations and clarifications provided under the federal universal waste regulation upon which this definition is based.

14. Section 66273.9: Correct citation is to section 66273.32: Requires United States Environmental Protection Agency (USEPA) notification for accumulating more than 5000kg universal wastes at any time.

Summary of Comment

5B and 6B: In the absence of such a notification limit, all retail establishments that collect used batteries would be subject to the unreasonable requirement of notifying the USEPA. This could discourage retailer participation in used battery collection programs. The commenter supports this regulatory provision.

Response

DTSC notes the comment that supports the universal waste accumulation limits below which universal waste handler notification requirements do not apply. This comment does not require regulation text changes. DTSC has provided further clarification in the

Final Statement of Reasons to clarify that these quantity limits for notification include batteries, lamps, and mercury-containing equipment that are universal wastes.

15. Section 66273.9: Definition of conditionally exempt small quantity universal waste generators (CESQUWGs).

Summary of Comment

10E: Quantity limits now include CRT devices which are now included in the definition of electronic devices. This inclusion of CRT devices will likely mean that a substantial number of small businesses would exceed the 220 pounds threshold that triggers the section 66273.32 notification and reporting requirements.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC disagrees with the commenter's interpretation of the definition of CESQUWGs as that definition relates to notifications and reports made pursuant to proposed section 66273.32. Section 66273.9 defines two types of universal waste handlers: persons who generate universal waste and persons who receive universal waste from offsite sources. The exemption from chapter 23 requirements provided to a universal waste handler that is a CESQUWG (see proposed §66273.8) is limited to the handler in its capacity as a generator. The loss of CESQUWG status by a generator who generates more than the 220 pounds thresholds would not subject the generator to the section 66273.32, subsection (c) notification requirements or the section 66273.32, subsection (d)(1) reporting requirements unless the generator also accepts universal waste electronic devices, CRTs, and/or CRT glass from offsite sources. Nor would such a generator be subject to the section 66273.32, subsection (d)(2) reporting requirements unless the generator generates 11,000 pounds (about 200) of electronic devices, CRTs, and CRT glass in a calendar year.

16. Chapter 23, article 3: Consolidation of small and large quantity universal waste handler requirements into a single article for a single category of handler: "universal waste handle".

Summary of Comment

10G: Support change to consolidate small and large quantity universal waste handler entities into a single article [3] within chapter 23.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

17. Section 66273.32(d): Annual reporting requirements for universal waste handlers who, by site, receive more than 100 kg (220 lbs) of electronic devices, CRTs, and CRT glass from any offsite source.

Summary of Comment

3C: Our organizations file annual reports indicating quantitative intake of CRT devices and components. Exempt from "current" universal waste handler reporting requirements with respect to requiring every donation site to be individually subject to reporting, particularly for sites that are devoted only to receive donations for shipments to a central processing facility.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. DTSC discusses the necessity for the notification and annual reporting requirements for universal waste handler in the Initial Statement of Reasons, pages 33 to 35. In summary, notifications are required so that DTSC can inspect universal waste handler locations and to ensure that certain handlers participating in the reimbursement program administered by the California Integrated Waste Management Board (CIWMB) are operating in compliance with applicable chapter 23 requirements for covered electronic wastes (CRT devices, CRTs, and certain electronic devices). Annual reports are also used to support reimbursement records maintained and enforcement by DTSC and CIWMB as well.

In addition, universal waste handler is defined in section 66273.9 as a handler who accepts universal wastes from another universal waste handler (a universal waste handler is defined by each location where the universal waste is received/accepted/managed). Although the universal waste handler in some cases may be a household or CESQUWG that is exempt from the requirements of chapter 23 (as specified in existing and proposed text of §66273.8), the universal waste handler who receives that universal waste is still subject to regulation under chapter 23 for their management of that universal waste received/accepted. These requirements include the notification, reporting and record keeping requirements contained throughout the chapter. This regulatory interpretation is also consistent with those interpretations and clarifications provided under the federal universal waste regulations and Federal Registers upon which this definition is based.

18. Section 66273.32(d): Annual reporting requirements for universal waste handlers, by site, who receive more than 100 kg (220 lbs) of electronic devices, CRTs, and CRT glass from any offsite source.

Summary of Comment

3D: Accept the submittal of a consolidated [annual] report for each Goodwill agency in lieu of an individual report from each of its donation sites [there are 13 statewide Goodwill agencies, servicing 400 donation sites throughout the State]. The

consolidated report would address only those donated electronic devices subsequently determined by Goodwill processing units to be non-saleable, non-operable or unusable.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment to allow for universal waste handlers to submit annual reports that combine the information from multiple universal waste handler locations. The amendment suggested in the comment would create a reporting scheme that would not require reporting of electronic devices that are donated and subsequently determined to be operable. Such electronic devices are properly classified as wastes upon donation. See Response to Comment 9, above. DTSC intends the proposed annual reporting requirement to be applicable to such wastes.

See response to comments 9 and 10 for a discussion of when a discarded material (e.g., electronic devices received at donation sites operated by universal waste handlers) becomes a waste (whether "saleable" or "un-saleable") and subsequently subject to regulation as a universal waste pursuant to chapter 23.

19. Sections 66273.32(c) and 66273.32(d): Notification and annual reporting requirements for universal waste handlers.

Summary of Comment

10H: Please confirm that the notification and reporting requirements do not apply to universal waste generators and apply only to those universal waste handlers of off-site wastes.

Response

DTSC disagrees with the interpretation proposed in the comment that the notification and reporting requirements specified in proposed section 66273.32, subsections (c) and (d) are only applicable to universal waste handlers of offsite universal wastes. In section 66273.32, subsection (c), the notification requirements apply to a universal waste handler, which, by definition (§66273.9), includes a generator of a universal waste, including a CESQUWG, when that universal waste handler accepts universal wastes from offsite sources. In section 66273.32, subsection (d), the annual reporting requirements apply to universal waste handlers who accept universal wastes from offsite source or who generate more than a certain quantity of universal wastes. See the Initial Statement of Reasons, pages 34 and 35 for DTSC discussion on these requirements. Response to Comment 15 also provides a discussion of the definition of universal waste handler and the section 66273.32 requirements applicable to certain universal waste handlers.

20. Section 66273.33(a)(2)(B): Allowance to mix battery types in one container.

Summary of Comment

10I: This allowance should be conditioned on chemical compatibility. The subsection should be amended to include "provided the types are chemically compatible."

Response

DTSC has evaluated the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment to condition the mixing of battery types to chemical compatibility. This comment also does not pertain to the regulation language or content of the 45-Day Notice and Public Comment Period (45-Day Notice) proposed text. The allowance of mixing of battery types in one container is an existing condition and is not part of the regulatory changes proposed in this rulemaking. See Response to Comment 24, below, for a discussion of the universal waste battery language proposed in this rulemaking.

To address potential clarity issues raised in this comment on mixing battery types in one container, DTSC has reviewed the existing federal universal waste rule and Federal Register discussion on which existing section 66273.33, subsection (a) language is based [see 40 C.F.R. §273.33 and 60 Fed. Reg. 25521 through 25523 (May 11, 1995)]. According to USEPA, the battery management activities allowed in this section are based on comments received on the proposed federal rule, where commenters argued that these activities (including mixing battery types in one container) were necessary for proper battery management to occur under the universal waste rule. USEPA provides an example of battery types mixed in containers at "collection points to avoid the complexity of requiring those [persons] dropping off batteries to identify and manage battery types separately." "Collected mixed batteries must be sorted by type in order to send them to the appropriate" facilities for proper recycling or treatment. USEPA further states that it agrees with its commenters that "as long as the metal or plastic casing of each individual battery or cell is not breached and remains closed and intact, the risk of releases to the environment is not increased by these activities" [see 60 Fed. Reg. 25522, 40 C.F.R. §273.33(a)(2) and Cal. Code Regs., tit. 22, §66273.33, subsec. (a)(2)]. Thus, as long as these management conditions of section 66273.33, subsection (a)(2) are met, mixing batteries of unlike "chemical compatibility" as described by the commenter is allowable under existing requirements.

21. Section 66273.33.5(a)(3)(A): Universal waste handlers are exempt from proposed article 7 requirements when managing electronic devices that are intact (except for occasional electronic devices that are accidentally or unintentionally broken and managed in accordance with packaging requirements of this section).

Summary of Comment

10J: This will preclude an UW handler from accepting broken electronic devices that have been intentionally broken. Amend the proposed language to include the phrase "or otherwise damaged."

Response

DTSC has reviewed the comment and does not concur with the proposed amendment. The exemption from chapter 23, article 7 requirements offered by section 66273.33.5, subsection (a)(3) is only available to a handler who manages intact electronic devices. The purpose of section 66273.33.5, subsection (a)(3)(A) is to clarify that the universal waste handler who intends to manage electronic devices pursuant to the section 66273.33.5, subsection (a)(3) exemption from chapter 23, article 7 requirements is obligated to ensure that intact electronic devices accepted for management are not deliberately broken during management. See Initial Statement of Reasons, pages 37 and 38.

DTSC has determined that no regulatory change is necessary. When a universal waste handler receives a broken electronic device, section 66273.33.5, subsection (a)(1)(B) authorizes a handler to contain an electronic device in a manner that prevents release of a universal waste or component of a universal waste to the environment. If a release has occurred, section 66273.37 prescribes containment and management requirements.

DTSC provides further clarification on this requirement in the Final Statement of Reasons.

22. Section 66273.33.5(a)(3)(A): Universal waste handlers are exempt from proposed article 7 requirements when managing electronic devices that are intact (except for occasional electronic devices that are accidentally or unintentionally broken and managed in accordance with packaging requirements of this section).

Summary of Comment

10K: Add new provision to allow removal of swivel bases on CRT devices, removable power cords, or other non-hazardous components. This will allow stacking of CRT devices on pallets and lessen safety hazards from loose cords.

Amend section to include new subsection (C) to proposed section 66273.33.5, subsection (a)(3) and amend proposed subsection (a)(3)(C) of that section as follows:
(C) The only treatment activity is the physical removal of cords or detachable non-hazardous components such as swivel bases from CRT devices; and
(D)...

Response

DTSC has evaluated the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment to allow the removal of electrical cords and swivel bases from CRT devices under the allowable management activities proposed in section 66273.33.5. Removal of discrete assemblies, such as power cords, may be conducted pursuant to proposed section 66273.71 requirements for universal waste handlers conducting certain treatment activities authorized under proposed article 7. In addition, removal of swivel bases on

CRT devices is a treatment activity that typically requires the removal of the case that surrounds the CRT. Removing the case around the CRT is not allowed under proposed section 66273.33.5 requirements, although this activity would be allowed under the requirements of proposed section 66273.72. Section 66273.72 allows for the disassembly of electronic devices (which include CRT devices) with the requirement that the universal waste handler conducting such disassembly activities comply with applicable requirements of article 7.

DTSC allows for the removal of power cords (pursuant to proposed §66273.71) and disassembly of CRT devices to remove swivel bases (pursuant to proposed §66273.72) but only by universal waste handlers conducting the treatment pursuant to proposed article 7.

DTSC has further clarified in the Final Statement of Reasons that discrete assembly removal includes power cord removal (authorized pursuant to proposed §66273.71), and that disassembly of electronic devices includes removal of swivel bases from CRT devices (authorized pursuant to proposed §66273.72).

23. Section 66273.33.5(b)(1)(B)3: Requirement to place CRTs in a container with packing material to prevent breakage during handling, storage and transportation.

Summary of Comment

2A: This section specifies that it is necessary to prevent the breakage of CRTs and to do so, packing material must be used. The CRT neck is thin and fragile. In spite of proper packaging, there may be a possibility of CRT breakage during storage and transportation.

Due to this reason, we request DTSC to add additional language to indicate that packaging must be such that it prevents any release to the environment. We believe that the real intent of the regulation is to prevent environmental pollution. Other sections within the proposed regulation (e.g., §66273.33.5, subsec. (a)(1)(B)), specify that the universal waste must be packaged in a manner to prevent any release to the environment.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment; however, DTSC agrees that further clarification on the standard is necessary.

The standard to place CRTs in a package to prevent breakage is a performance standard rather than a prescriptive standard. The introductory text of this subsection, section 66273.33.5, subsection (b)(1)(B) requires that CRTs be managed in a manner that prevents releases of any CRTs or components of any CRTs to the environment under reasonably foreseeable conditions. DTSC has interpreted this to mean that the standard prescribed in this subsection focuses on preventing releases to the

environment (e.g., release of hazardous constituents to the air, water or soil). In the Initial Statement of Reasons, DTSC has clarified this for the management of broken electronic devices in section 66273.33.5, subsection (a)(1)(B)2 (as discussed in Response to Comment 21, above), and also includes that interpretation for the subsection referenced in this section.

DTSC has further clarified in the Final Statement of Reasons that the same performance to prevent releases to the environment for broken electronic devices is also applicable to the management of CRTs pursuant to proposed section 66273.33.5, subsection (b)(1)(B) requirements.

24. Section 66273.34(a): Labeling requirements for batteries managed as universal waste.

Summary of Comment

5C and 6C: Most PRBA members support the RBRC collection program, which uses the label proposed in the regulations. However, batteries received from out-of-state can use the federal label requirements, "Waste Battery(ies)" or "Used Battery(ies)" which the proposed regulations repeal. PRBA [and RBRC] suggest that the battery labeling requirements be maintained which are consistent with the federal [universal waste] rule [labeling requirements].

Response

DTSC concurs with the comment and has modified the text to reflect that the terms "Waste Battery(ies)" or "Used Battery(ies)" may also be used to label universal waste batteries. This text change is consistent with current federal universal waste requirements for labeling universal waste batteries.

In consideration and evaluation of this comment, DTSC determined that it is necessary to clarify that, pursuant to Health and Safety Code section 25219.1, subdivision (a), existing federal law limits the universe of batteries that would otherwise be subject to DTSC's universal waste battery requirements. Consequently, DTSC has added the following language to section 66273.2 (Applicability—Batteries) of the proposed regulations:

"(A) The requirements of this chapter do not apply to persons collecting, storing or transporting batteries that are subject to subsection (a) of section 104 [42 U.S.C. § 14323(a)] of the federal Mercury-Containing and Rechargeable Battery Management Act (42 U.S.C. § 14301, et. seq.). The Act requires that the collection, storage, and transportation of such batteries be regulated pursuant to applicable 40 Code of Federal Regulations part 273 standards."

DTSC provides further clarification of these requirements in the Final Statement of Reasons.

25. Section 66273.34(a): Labeling requirements for batteries managed as universal waste.

Summary of Comment

5D and 6D: Should the proposed regulations be adopted, a grandfather clause should be added to allow time for existing supplies of labeled containers to be used (i.e., those containers already labeled using the existing federal labeling standards for universal waste batteries).

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. See Response to Comment 24, above, for a discussion on the applicability of state universal waste regulations to federally-regulated batteries (as defined in proposed 66273.2).

26. Section 66273.34(b): Mercury-containing equipment labeling requirements.

Summary of Comment

10L: Agree with proposed language.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

27. Section 66273.34(g): Labeling and marking areas where electronic devices and CRTs are stored.

Summary of Comment

2B: It is stated in this section that "either of the following phrases" can be used to label an area in lieu of labeling each container of electronic devices, CRTs or CRT glass. Need clarification that storage of electronic devices, CRTs and CRT glass in one area is an acceptable method.

Our understanding is that the enforcement division prefers that we maintain separate designated areas for electronic devices, CRTs and CRT glass. It is not practically possible to implement this because we receive mixed loads from customers and one single container could have CRTs, electronic devices and inadvertently broken CRTs as well. Furthermore, storing electronic devices, CRTs and CRT glass in the same area does not pose any threat to the environment nor is there any issue with incompatibility.

Response

DTSC agrees with the commenter's understanding and interpretation that the regulations provide that a demarcated area may be used to accumulate/store a combination of electronic devices, CRTs and CRT glass, provided that the appropriate

labeling of section 66273.34, subsection (g) be maintained. In further evaluation of this comment, DTSC has also determined that the regulation is sufficiently clear on this point and no regulatory change is necessary. Although DTSC believes that the Initial Statement of Reasons is sufficiently clear on this point as well, DTSC provides further clarification in the Final Statement of Reasons in support of this interpretation.

28. Section 66273.34(g): Labeling requirements for designated accumulation areas and containers that contain a combination of electronic devices, CRTs and CRT glass.

Summary of Comment

10M: Operationally, it would be extremely helpful if this combined wording could be used on containers or other packaging. As long as the universal waste handler can provide proper containment as necessary for each type, combined storage and transport should be allowed.

Amend [section 66273.34, subsection] (g) to include the phrase "...accumulate those universal wastes in a container or other appropriate package or within a designated..."

Response

DTSC has reviewed the comment and agrees with the commenter that it is appropriate to extend the labeling requirements of section 66273.34, subsection (g) to containers that hold a combination of electronic devices, CRTs and CRT glass. This subsection has been changed to allow for combining these wastes into appropriate containers within the demarcated areas labeled as prescribed in this subsection. It is important to note that appropriate containers must also meet the container standards for electronic devices, CRTs and CRT glass provided in section 66273.33.5 where the performance standard is to prevent breakage of these wastes in the containers. These containers must also meet the performance standard to prevent releases to the environment as is prescribed in section 66273.33.5. With the addition of this new regulatory text, DTSC has further clarified these points in the Final Statement of Reasons.

29. Section 66273.35(b) [Repealed]: Repealed subsection (b) that allows longer than one year accumulation time limit under certain conditions.

Summary of Comment

5E and 6E: PRBA [and RBRC] recommends either to not make this change, or exclude from this limit those "bona fide" recycling programs that employ box collection at retail and other locations (e.g., libraries, courthouses and police stations).

Forcing annual shipments less than full collection boxes seems unnecessary, would unnecessarily increase collection costs and would be wasteful in terms of packaging, energy efficiency and green house gas generation (e.g., unnecessary transportation).

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. DTSC provided its reasons for repealing section 66273.35, subsection (b) in the Initial Statement of Reasons, pages 38 and 39, and believes that the one year accumulation limit is necessary to decrease the likelihood of stockpiles of mismanaged universal wastes at handler facilities, and thus decreasing the likelihood of releases to the environment of hazardous constituents from universal wastes.

For universal waste batteries that are federally-regulated (as defined in proposed §66273.2), these batteries may be managed in accordance with applicable universal waste battery management standards contained in 40 Code of Federal Regulations part 273. These federal requirements include the provision to allow for longer accumulation times when a demonstration can be made that accumulation is necessary for proper recovery, treatment, or disposal (see 40 C.F.R. §§273.15 and 273.35).

See Response to Comment 24, above, for a discussion on the applicability of state universal regulations to federally-regulated batteries (as defined in §66273.2).

30. Section 66273.35(b): Accumulation time demonstration choices.

Summary of Comment

10N: In many cases, handlers are frequently removing the wastes from a storage area on a daily, weekly or other frequency significantly less than the allowed one year accumulation time. It would be extremely helpful if the regulations would explicitly allow for this [more] frequent removal without the need to track the first waste added to the container or area.

Amend subsection (b) to include: (7) Any other method which indicates that the universal wastes are removed on a frequent basis such as daily or at least weekly.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. This comment is not related to the proposed text changes in this section; however, DTSC continues to believe that the demonstration of accumulation start dates is necessary to implement and enforce the one year accumulation time limit prescribed in this section. The one year accumulation limit is based on federal universal waste regulations.

31. Sections 66273.36(b), 66273.36(c) and 66273.36(d): Personnel training requirements; (b) annual training and (c) and (d) recordkeeping.

Summary of Comment

5F and 6F: PRBA [and RBRC] is concerned that the proposed annual training and recordkeeping requirements will appear too onerous to RBRC's retail and other

collection partners and discourages collection program participation. Existing personnel training requirements have served their purpose well and should be retained.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. As is stated in the Initial Statement of Reasons for this section, pages 39 to 41, DTSC explains the need for the proposed changes to existing universal waste handler training requirements. The proposed training requirements provide clear and objective training standards for all personnel who handle universal waste at a handler's facility. The proposed requirements also specify when and how the training must be documented, which is proposed to enhance implementation and enforcement.

Batteries that are federally-regulated (as defined in proposed §66273.2) should be managed in accordance with applicable universal waste battery management standards contained in 40 Code of Federal Regulations part 273. These federal requirements include training requirements (see 40 C.F.R. §§273.16 and 273.36) which differ from those training requirements for universal waste handlers proposed in this rulemaking.

See Response to Comment 24, above, for a discussion on the applicability of state universal waste regulations to federally-regulated batteries (as defined in §66273.2).

32. Section 66273.38(g): Immediately notify the department of illegal hazardous waste shipment.

Summary of Comment

2C: It is easier to comply with this requirement for the most obvious shipments (e.g., hazardous waste drums with labels, leaking hazardous waste from containers). However, a non-conforming shipment may not be identified until it is processed which might take few days to several weeks (e.g., hazardous waste containerized and placed inside a larger cubic yard box with other electronic devices and electronic device components).

Furthermore, treatment, storage or disposal facilities (TSDFs) are allowed 15 days time to resolve the issue of non-conforming shipments. We request DTSC to consistently enforce this requirement and allow universal waste electronic device treaters [sic] and recyclers a period of 15 days to resolve the issue.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment.

The proposed text is an existing requirement, and therefore outside scope of this rulemaking effort. This requirement is based on the federal universal waste rule. For universal waste handlers, no hazardous waste acceptance plan is required such as is required for permitted facilities; therefore immediate notification of shipments that

contain hazardous waste is appropriate given that universal waste handlers are not permitted TSDFs which are allowed as a condition of holding a permit to accept hazardous wastes. The term "immediate" is not defined by a time limit and is based on the judgment of the person responsible for the notification in such non-conforming shipments.

33. Section 66273.39: Tracking shipments.

Summary of Comment

5G and 6G: Supports proposed language as written for aggregates of universal waste received from households or CESQUWGs.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

34. Section 66273.39(b): Allows the aggregate recording for universal wastes received from households or CESQUWGs.

Summary of Comment

3A: Exempt from reporting confidential information of our residential donors of CRT devices, except as required by provisions of SB 20/50.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. The proposed text of section 66273.39, subsection (b) clearly provides that when a universal waste handler receives universal wastes from a household or CESQUWG recording the name of that household or CESQUWGs is not required. Therefore, the exemption that the commenter requests in this section is not necessary. A discussion of this new requirement is provided in the Initial Statement of Reasons, page 42.

35. Section 66273.39(b)(1): Allows universal waste handler who receives universal wastes from household or CESQUWG to record these in lieu of recording original universal waste handler (which can be the UW generator in this case).

Summary of Comment

10"O": Many handlers received universal wastes from both households and CESQUWGs, such as hardware stores, electronic stores, and office supply stores. For example, batteries at containers that are monitored but without facility staff directly at the container to track whether the waste was from a household or a business.

Amend subsection (b)(1):..."household generator" and/or "CESQUWGs"...

Response

DTSC has reviewed the comment and agrees with the change proposed in this comment as well as the reasons for that change. The text has been changed to reflect the language as proposed.

36. Section 66273.40: Export requirement and notice of consent from USEPA for CRT glass. [Comment received during oral comments portion of the Public Hearing held on August 11, 2008.]

Summary of Comment

8A: Request that payments in the Senate Bill (SB) 20/50 program [administered by the CIWMB through the board's statute and regulations] require a notice of consent for CRT glass exports to be included in payment requests made to CIWMB. End-use destination information should be required for payment claims to the CIWMB.

Response

DTSC has reviewed the comment and noted the comment. The requirements for claim submittals are contained in California Code of Regulations, title 14, which are administered by the CIWMB. Therefore, this comment is outside the scope of this rulemaking.

A discussion of the proposed export requirements in this rulemaking (§66273.40) are provided in the Initial Statement of Reasons, page 42 to 45.

37. Section 66273.60(b): Destination facilities can conduct certain treatment activities.

Summary of Comment

7F: This section does not appear to allow "destination facilities" that shred electronic and CRT devices that are classified as RCRA hazardous waste to store these materials under universal waste provisions. Please confirm this interpretation is correct.

We have previously presented evidence on how this creates an unfair business advantage to the universal waste handler which is not a permitted facility and regulates businesses engaged in the same activities in a different manner.

Response

DTSC has reviewed the comment and agrees with the interpretation provided in the comment for the activities allowed at destination facilities in proposed section 66273.60, subsection (b). The conditions of this subsection are discussed in the Initial Statement of Reasons, pages 47 and 48. DTSC has also determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment.

DTSC does not agree with the commenter that restricting the management activities at destination facilities in California to only those activities allowed under the federal universal waste rule for destination facilities creates an unfair business advantage to

non-permitted facilities in the state. DTSC does not have the statutory authority to promulgate hazardous waste regulations that are less stringent than the federal hazardous waste requirement (for which these destination facilities must comply with under the federal universal waste rule). In allowing destination facilities to conduct certain lower risk management activities, DTSC is allowing these facilities to conduct activities that would otherwise require a permit. This expansion of management allowed at these facilities, as long as that management is conducted pursuant to applicable article 3 requirements, will facilitate more recycling of these universal wastes within California and thus reduce the amount of universal wastes exported out of California for further recycling.

38. Section 66273.60(c): Destination facilities can conduct certain treatment activities.

Summary of Comment

7G: This section appears to allow a "destination facility" to only remove CRTs from CRT devices, to dismantle electronic devices, and to remove the yokes from CRTs that are non-RCRA hazardous wastes under the universal waste handling provision [in proposed article 7]. Please confirm this interpretation is correct.

Response

DTSC has reviewed the comment and disagrees with the interpretation provided by the commenter for the activities allowed at destination facilities in proposed section 66273.60, subsection (c). The subsection only allows destination facilities to store universal waste under the applicable provisions of chapter 23 (i.e., up to one year) prior to conducting certain treatment activities. These treatment activities are described in section 66273.72, subsection (b) [remove CRTs from electronic devices that are CRT devices], section 66273.72, subsection (c) [dismantle electronic devices that are not CRT devices and remove yokes from CRTs], section 66273.73, subsection (a)(1)(A) [treat electronic devices and produces certain residuals], and/or section 66273.73, subsection (b)(1) [treat CRTs, breaking the CRT glass]. Destination facilities conducting these treatment activities must conduct those activities as provided for in the facility permit or other grant of authorization, which may reference the applicable article 7 management requirements for these treatment activities. The conditions of this subsection are discussed in the Initial Statement of Reasons, pages 47 and 48. DTSC has also determined that no regulatory change is necessary.

39. Section 66273.60(c): Destination facilities can conduct certain treatment activities.

Summary of Comment

7H: Please provide specific examples of universal wastes that would be classified as non-RCRA hazardous wastes.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. However, DTSC agrees with the commenter that further clarification is needed for examples of non-RCRA hazardous wastes that might be classified as such and managed pursuant to the proposed section 66273.60, subsection (c) requirements. Some examples of these universal wastes that are non-RCRA hazardous waste may include universal wastes generated by households and/or CESQUWGs. These two entities are excluded from regulation under the federal universal waste rule.

DTSC has further clarified these examples in the Final Statement of Reasons.

40. Section 66273.60(c): Destination facilities can conduct certain treatment activities.

Summary of Comment

7I: This section does not appear to allow facilities such as ECS Refining that treat electronic devices and CRTs to store these materials as universal waste prior to treatment. Is this correct? If so, why has this section been inserted into the regulations? What purpose does it serve?

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC disagrees with the commenter. The proposed requirements of section 66273.60, subsection (c) do allow the storage of certain universal wastes that are non-RCRA hazardous wastes (e.g., electronic devices and/or CRTs that have been tested and shown not to be RCRA hazardous wastes) under the provisions of chapter 23.

See Response to Comments 38 and 39 for further discussion on the provisions of this subsection as proposed in this rulemaking.

41. Section 66273.71: Authorization for Removal Activities.

Summary of Comment

5H and 6H: Supports proposed language as written.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

42. Sections 66273.33.5(a)(1)(B)2., 66273.75(b)(3), and 66273.72(c)(2)(C)3.: Immediately clean up and place in a container any electronic device or CRT that is accidentally or unintentionally broken and that might reasonably be expected to cause a release to the environment under foreseeable conditions.

Summary of Comment

2D: These sections specifically address unintentionally or accidentally broken electronic devices and CRTs.

It is our understanding that DTSC excludes normal dismantling and shredding operation from the "immediate clean-up" requirement. It is inevitable that pieces of metal and plastics will fall off the work bench and conveyor during dismantling and shredding operation. We believe that good housekeeping practices (such as cleaning the area at the end of the shift), personal protective equipment (PPE) requirements and personal hygiene policy (employees required to leave their PPE onsite) are sufficient enough to prevent any release to the environment.

We request DTSC to clarify on the term "release to the environment". We have experienced inconsistency among inspectors regarding the term release and the condition that could lead to an environmental release. We strongly believe that pieces of metal and plastics on a concrete floor and inside a building do not constitute a release.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment to add conditions in the regulatory text which describe or define the term "immediate". The term "immediate" is not defined by a time limit and is based on the judgment of the person responsible for handling the cleanup. DTSC has provided further clarification of the term "immediate" in Response to Comment 23, above.

DTSC has provided a discussion of "release to the environment" in the Initial Statement of Reasons for section 66273.33.5 with an example as "(i.e., a release of a hazardous constituent to the air, water, soil)", page 37 (as modified in the Final Statement of Reasons for this section). The Initial Statement of Reasons for section 66273.72 requirements provides an explanation of the term "environment" to mean (i.e., soil, air, water), page 52. In general, releases inside a covered building (e.g., a building with a roof and walls) on a concrete floor would not likely constitute a "release to the environment". However, if that hazardous constituent on the floor migrates via foot traffic or other means (e.g., poor housekeeping practices) to the soil, air, or water outside that building or through a crack in the flooring, then that condition may be deemed a "release to the environment." Therefore, each situation should be evaluated separately.

43. Section [New] 66273.73(c)(1): Proposed new subsection by commenter to allow use of heat to remove chips from printed circuit boards.

Summary of Comment

4G: Add a section to read: (E) Removal of components from printed circuit boards by use of a hot plate to loosen the soldered connections, provided ventilation is used.

Response

DTSC does not agree that the application of heat to circuit boards to remove components, as proposed by the commenter, is an appropriate treatment activity authorized under article 7 of chapter 23. DTSC has reviewed the comment and has determined that further evaluation of allowable treatment methods for residuals is warranted in this rulemaking. DTSC has carefully reviewed all the comments related to allowing other treatment methods under proposed article 7 standards, and has determined that it would be beneficial to facilitate recycling opportunities in California to allow certain treatment methods for one specific treatment residual: "residual printed circuit boards."

In this effort, DTSC has made changes to section 66260.10, section 66273.9, and article 7 to reflect the new requirements placed on universal waste handlers conducting further authorized treatment of residual printed circuit boards that are removed from electronic devices pursuant to the activities authorized by sections 66273.71, 66273.72 and/or 66273.73. Careful consideration has been given to ensure that these residual printed circuit boards managed pursuant to article 7 are classified and managed appropriately. Additional requirements for managing these residual printed circuit boards include labeling and containerization standards that are consistent with the hazards posed by these treatment residuals.

As a result of these changes, other text has been deleted throughout article 7 to remove inconsistent language which would preclude the desired outcome of safely managing these specific treatment residuals. Further discussion of these changes to the affected sections mentioned above is provided in the Final Statement of Reasons.

44. Section 66273.73(c)(2)(A): Electronic device and CRT treatment activity involving the use of chemicals, including water, requires prior authorization from DTSC (not allowed under proposed regulations).

Summary of Comment

2E: The battery electrolyte and liquid mercury draining activities as specified in section 66273.33, subsection (a)(2) and section 66273.72, subsection (e) are exempt activities. These operations have a greater potential to damage the environment than processes that use water to separate complex materials (different polymers, leaded / unleaded glass, etc). The use of water to separate materials is a well established treatment activity in Europe and numerous other states in the United States. This has been used for a number of years in dense media separation, froth flotation, rising current

separators etc. Authorizing this type of process in California will allow recyclers to adopt more efficient and cost effective method for glass, plastics and metals separation.

We request DTSC to authorize this activity under the universal waste management standard. We strongly believe that this will promote more recycling opportunities in California, allow material to be kept in California, and not send to other states or countries. We feel that there should be state agency's oversight and guidance on the residual management [i.e., sludge disposal and waste water (hazardous waste) management].

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment. DTSC addressed the use of other treatment methods that use water to separate materials generated through the treatment of electronic device and CRTs in its previous rulemaking for managing electronic hazardous waste (R-01-06). DTSC allows the use of "recirculating coolant" in existing regulations for certain CRT treatment activities authorized in article 7, and has proposed to continue this activity under this rulemaking. DTSC continues to agree that small volumes of water used in CRT cutting machines is appropriate for this activity. The types of material separation machines referred to in the comment which use large volumes of water are not appropriate treatment methods for electronic devices, CRTs or CRT glass because of the large volume of waste water generated by these machines. DTSC does not agree that these large volumes of water should be used to treat these universal wastes.

45. Section 66273.73(c)(2)(A): This section delineates the allowed "treatment methods" for electronic devices and CRTs.

Summary of Comment

4B: We understand this section to not allow removing chips from printed circuit boards that have been derived from universal waste electronic devices because this process requires application of heat in order to loosen the soldering that holds the chips to the board.

We don't believe an electronic device becomes a waste until the usable components have been removed [such as the printed circuit boards].

Response

DTSC has reviewed the comment and does not agree with the comment regarding when an electronic devices becomes a waste. See Response to Comment for Comment 9 for an explanation of when an electronic device becomes a waste and subject to regulation under chapter 23.

DTSC has evaluated the comment further and agrees that regulatory changes are needed to the proposed requirements to address the further treatment of certain

treatment residuals: residual printed circuit boards. See Response to Comment 43 and the Final Statement of Reasons for an explanation of those changes.

46. Section 66273.73(c)(2)(A): Same topic as Comment 45.

Summary of Comment

4C: Once the printed circuit board has been removed from the device, it should be classified as scrap metal. If the printed circuit boards removed from electronic devices are "hazardous waste," while printed circuit boards received from off-site are "scrap metal" then the Department has set up a regulatory situation in which the same item is classified differently depending upon its origin. This makes no sense and discourages recycling.

Response

DTSC has reviewed the comment, has agreed with the comment concerning scrap metal determinations, and has determined that regulatory changes are necessary. Sections 66260.10 and 66273.9 and article 7 of chapter 23 have been changed to reflect the inclusion of residual printed circuit boards removed from electronic devices (as authorized in proposed §§66273.71, 66273.72 and/or 66273.73) in the existing definition of "scrap metal." DTSC further clarifies those changes in the Final Statement of Reasons.

DTSC has evaluated the comment further and agrees that regulatory changes are needed to the proposed requirements to address the treatment of residual printed circuit boards. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment residual printed circuit boards.

47. Section 66273.73(c)(2)(A): Same topic as Comment 45.

Summary of Comment

4D: Reuse of intact electronic devices and components is a higher form of recycling than is shredding for metal recovery; the Department should be encouraging this activity rather than placing barriers to it.

Response

DTSC has reviewed the comment and noted that the comment is in support of DTSC's efforts to promote recycling. DTSC has evaluated the comment further and agrees that regulatory changes are needed to the proposed requirements to address the treatment of residual printed circuit boards to facilitate recycling of electronic devices within California. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment residual printed circuit boards.

48. Section 66273.73(c)(2)(A): Same topic as Comment 45.

Summary of Comment

4E: Removing components from printed circuit boards, while it does involve application of external heat, does not pose a risk to workers, the public, or the environment. All AER [the commenter] removal stations are ventilated to a baghouse with a high efficiency particulate air (HEPA) filter. [According to the commenter] air sampling shows lead levels below [federal] Occupational Safety and Health Administration (OSHA) action level, therefore, no respiratory protection is required. The proposed regulations allow removal of mercury from electronic devices; this activity is more of a threat than volatilizing lead in heating printed circuit boards to remove components.

Response

DTSC has reviewed the comment and agrees that regulatory changes are needed to the proposed requirements to address the treatment of residual printed circuit boards to facilitate recycling of electronic devices within California. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment residual printed circuit boards.

DTSC does not agree with the commenter that the proposed regulations allow the removal of mercury from electronic devices. The proposed regulations mirror existing state and federal universal waste regulations related to management of universal waste mercury-containing equipment, which do not include electronic devices, as defined in the proposed regulation in section 66273.9.

49. Section 66273.73(c)(2)(A): Same topic as Comment 45.

Summary of Comment

4F: We do not believe that the Department should structure the regulations to require a hazardous waste treatment facility permit for the application of heat to remove chips from printed circuit boards. Resale of chips removed from printed circuit boards is a significant part of our business.

Response

DTSC has reviewed the comment and agrees that regulatory changes are needed to the proposed requirements to address the treatment of residual printed circuit boards to facilitate recycling of electronic devices within California. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment of residual printed circuit boards.

50. Section 66273.73(c)(2)(A): Prohibition of use of chemicals (including water) and certain application of heat for treatment of electronic devices or CRT devices.

Summary of Comment

7J: This section should allow the use of water and heat for separation purposes, so that these wastes can be fully recycled without having to obtain a hazardous waste facility permit. The proposed regulations are a disincentive to recycling in California and encourage the export of these materials.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary to respond to the comment related to allowing other forms treatment using water under proposed article 7 requirements. See Response to Comment 44 for an explanation of the limits placed on the types of treatment allowed that use small amounts of water.

DTSC has evaluated the comment further and agrees that regulatory changes are needed to address the use of other treatment methods that use heat to treat residual printed circuit boards to facilitate recycling of electronic devices within California. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment residual printed circuit boards.

51. Section 66273.75(c): Classification and management of electronic devices and CRT treatment residuals (printed circuit boards, scrap metal, non-hazardous materials).

Summary of Comment

7K: We propose that this section be restructured to allow that components and fractions of electronic devices and CRT devices become newly-generated materials that may be treated in any way allowed for that material. Of course, if the newly-generated fraction is a characteristic hazardous waste, or does not qualify for some other regulatory exemption, then treatment of it should be regulated.

Response

DTSC has reviewed the comment and has determined that regulatory changes are necessary. See Response to Comment 46 and the Final Statement of Reasons for an explanation of the regulatory changes to address residual printed circuit boards that are "scrap metal."

DTSC has evaluated the comment further and agrees that regulatory changes are needed to the proposed requirements to address the treatment of residual printed circuit boards. See Response to Comment 43 and the Final Statement of Reasons for an explanation of the regulatory changes to address the treatment residual printed circuit boards.

The regulation of non-hazardous materials derived from the treatment of electronic devices, CRTs and/or CRT glass is prescribed in proposed section 66273.75, subsections (b) and (c) requirements which are further explained in the Final Statement of Reasons.

52. Section 66273.72(b): Removal of CRTs from electronic devices that are CRT devices is exempt from notification requirements for universal waste handlers who conduct treatment authorized by article 7.

Summary of Comment

2F: This process is similar to disassembly of electronic devices that are not CRT devices. We believe that this exemption would put us at a competitive disadvantage. Hence, we request the department to remove this exemption and enforce the requirement uniformly.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. DTSC does not concur with the amendment suggested in the comment.

See the Initial Statement of Reasons, pages 33 to 35, for the detailed explanation of the rationale for the establishment of the notification quantity limits for universal waste handlers managing universal wastes under article 3. See the Initial Statement of Reasons, pages 54 and 55, for the detailed explanation of the rationale for the notification requirements for universal waste handlers who conduct electronic devices treatment activities authorized pursuant to article 7.

53. Section 66273.74(b)(1)(J)1.: Universal waste handlers of electronic devices and CRTs provide information on exempt material (other than scrap metal and yokes) in their annual report.

Summary of Comment

2G: Are universal waste handlers/recyclers required to report on non-hazardous and recyclable materials like plastics, packaging material etc.? We request DTSC to specify/clarify on exempt material.

Response

DTSC has reviewed the comment and has determined that a regulatory change is necessary. Section 66273.74, subsection (b)(1)(J)1.e. has been deleted as it required the reporting of "exempt material" in the annual reports for universal waste handlers conducting treatment activities under article 7. DTSC believes that this requirement is not necessary and would be overly burdensome for universal waste handlers to comply. DTSC provides clarification of this reporting requirement in the Final Statement of Reasons.

54. Sections 66273.75(a)(8) and 66273.75(c)(3): Requires that CRTs are only treated for the purpose of recycling all CRT glass, and that all CRT glass (including treatment residuals) are sent for appropriate recycling (CRT glass manufacturer or primary or secondary lead smelter).

Summary of Comment

1A: Does CRT glass have to go directly from the California recycling facility, "destination facility," to the glass manufacturer or primary/secondary lead smelter?

1B: Can the glass go to another facility for further treatment prior to going to the glass manufacturer or primary/secondary lead smelter?

1C: Section 66273.75(a)(8) states that one or more types of CRT glass, while the (c)(3) [states] all residuals. Is there a distinction?

1D: Please define all CRT glass residuals. Does this include the steel inside the CRT tube?

Response

DTSC has reviewed the comment and has determined that a minor regulatory change is necessary to both referenced sections to clarify that all CRT glass, including residual CRT glass (that glass derived from the treatment of electronic devices, CRTs and/or CRT glass) must be sent for recycling to a facility as prescribed in this section. DTSC provides further clarification of this requirement in the Final Statement of Reasons.

To address these comments specifically:

1A: No, CRT glass does not need to go directly from the California universal waste treatment facility (or destination facility) directly to the glass manufacturer or the primary or secondary lead smelter. Universal waste CRT glass may be transported to another universal waste handler, destination facility, or hazardous waste facility, as appropriate pursuant to applicable division 4.5 requirements.

1B: Yes, universal waste CRT glass may go to another universal waste handler, destination facility, or hazardous waste facility for further treatment, as appropriate under applicable requirements of division 4.5.

1C and 1D: No, the intent of the regulations was to not provide a distinction between the two subsections related to CRT glass. Both subsections have been changed to reflect that all CRT glass, including residual-CRT glass [which would have the same characteristics of CRT glass, it is just a residual from the treatment process(es) used to treat CRTs and/or CRT glass] must be ultimately sent for recycling to an appropriate facility.

55. Section: NA

Summary of Comment

9A: No comments or concerns for the proposed regulations.

Response

DTSC has reviewed the comment and noted that the comment is in support of the proposed text.

56. Sections 66273.9 and 66273.60: Definition of destination facility; destination facility requirements.

Summary of Comment

7L: Does the Department consider ECS Refining to be a destination facility? If so, why?

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking as DTSC does not make regulatory interpretative decisions on the compliance status of particular hazardous waste facilities as part of the California Administrative Procedures Act rulemaking process.

57. Section 66273.9: Definition of electronic device.

Summary of Comment

7M: Presumably, all electronic devices and CRT devices are RCRA hazardous wastes. The presumption for listing electronic devices and CRT devices as universal wastes is that they fail the [toxicity characteristic leaching procedure] TCLP for lead and possibly other metals. Please confirm this interpretation and give the regulated community that handles assorted electronic waste from various manufacturers and manufacturing dates how they can know whether a particular electronic device or CRT device is a RCRA hazardous waste or a non-RCRA hazardous waste.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking as electronic devices and CRT devices were added as universal waste in a previous rulemaking (see R-2001-06). In R-2006-02, electronic devices (formerly consumer electronic devices) regulated under chapter 23 were defined as only those electronic devices that exhibit the hazardous waste characteristic of toxicity. This rulemaking effort does not change that part of the definition. In the definition of electronic devices, DTSC provides as examples a list of electronic devices that may meet the hazardous waste criteria for toxicity. Also, the "Applicability" section of the regulations for electronic devices (§66273.3) clarifies further which electronic devices are regulated.

In this rulemaking, CRT devices are included in the universal waste category of electronic devices as discussed in the Initial Statement of Reasons, both in the discussion of the definition of electronic devices as well as in the "Applicability" section that describes which electronic devices are subject to regulations under chapter 23 (§66273.3). If a CRT device meets the hazardous waste characteristic of toxicity, it is

considered a hazardous waste under existing regulations, and this criterion has not been changed by this rulemaking.

58. Section 66261.4(b)(4): Exclusions for wastes which are not hazardous wastes, specifically certain used chlorofluorocarbon refrigerants.

Summary of Comment

10P: Please clarify if section 66261.4, subsection (b)(4) includes chlorofluorocarbon refrigerants from household units.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking. The change made to this subsection of existing text is grammatical only and no substantive requirements have been proposed as part of this rulemaking.

59. Section 66273.2(b)(1): Batteries not covered under chapter 23, specifically certain automotive-type spent lead-acid storage batteries.

Summary of Comment

10Q: Since small sealed lead-acid storage batteries are not considered automotive-type batteries, are they then considered universal wastes? If these batteries are universal waste, then there needs to be precautions in the management requirements in section 66273.33 since these batteries are chemically incompatible with alkaline batteries.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking. The changes made to this subsection of existing text are grammatical only and no substantive requirements have been proposed as part of this rulemaking. DTSC has provided a response to a similar comment related to the management requirements for batteries of different types in Response to Comment 20.

60. Section 66273.33(b)(1): Lamp containment requirements: containers shall remain closed.

Summary of Comment

10R: It is a time consuming operation to continually close lamp containers after adding a few tubes. Some industry standard containers are difficult to remove the cover and require use of a second person or placing the lamps down and risking breakage and creating a greater danger. Since lamps are sealed containers, there is no exposure risk. Broken lamps would need to be contained anyway. This provision should be revised as follows [in **bold** text]:

(1) A ~~large quantity~~ universal waste handler of universal waste shall contain any lamp in a containers or packages that are is structurally sound, adequate to

prevent breakage, and compatible with the contents of the lamps. Such a containers ~~and or~~ packages ~~shall remain closed and~~ shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking. The changes made to this subsection of existing text are regulatory construct only [e.g., in this rulemaking existing subsec. (c) has been changed to subsec. (b) because existing subsec. (b) has been repealed], and no substantive requirements have been proposed as part of this rulemaking.

61. Section 66273.33(b)(2): Immediately cleanup and contain any lamp that shows evidence of leakage or damage that could cause the release of mercury or other hazardous constituents to the environment.

Summary of Comment

10S: Given the volatility of mercury from broken tubes, standard recommended cleanup is to first ventilate the area for at least 15 minutes. Please confirm that this ventilation activity to protect cheap [sic] workers is in compliance with the requirement to "immediately" clean up.

Response

DTSC has reviewed the comment and has determined that no regulatory change is necessary. Also, this comment is not within the scope of this rulemaking. The changes made to this subsection of existing text are regulatory construct only [e.g., in this rulemaking existing subsec. (c) has been changed to subsec. (b) because existing subsec. (b) has been repealed], and no substantive requirements have been proposed as part of this rulemaking.

The term "immediate" is not defined by a time limit and is based on the judgment of the person responsible for handling the cleanup. DTSC has provided further clarification of the term "immediate" in Response to Comments 23 and 42, above.